

east of the Hawaiian Islands; strong gales occurred on the 6th to 10th between about 39° N. and the central Aleutians; and strong to whole gales blew on the 6th, 8th, and 9th over a varying stretch of sea between southern Japan and about longitude 170° E.

A glance at the adjoined table of storms and gales will sufficiently call attention to other high winds outside of the Tropics and indicate as well the far less degree of storminess prevailing over the North Pacific than over the North Atlantic this month.

**Tehuantepecers.**—In the Gulf of Tehuantepec northers of moderate gale force were experienced on the 6th, 12th, 17th, and 28th; of fresh gale force on the 10th; and of whole gale force (10) on the 13th and 14th, during the prevalence of an anticyclone over the western part of the Gulf of Mexico. Off the middle Central American coast a northeaster of force 7 occurred on the 16th.

**Tropical cyclones.**—No tropical cyclones of consequence occurred this month, but a depression southwest of Guam caused a northwest gale of force 9 on the 2d.

**Fog.**—There were 10 or more days with fog this month off the central California coast within 100 miles of San Francisco and 7 days within a similar distance of San Diego. Along the upper California and the Oregon and Washington coasts fog was reported on 11 days altogether. Between longitudes 130° and 170° W. latitudes 35° and 50° N., 1 to 4 days with scattered fog, distributed through the month, were experienced in the majority of the 5° squares. The most interesting weather record of March is that relating to the occurrence of dense fog on the 4th to 7th in the Gulf of Panama. Not before in recent years has this phenomenon been reported by seamen in this locality.

#### CYCLONES IN THE SOUTH INDIAN OCEAN, FEBRUARY, 1932

The London Meteorological Magazine for March, 1932, reports from the Times of February 6–10 that a hurricane which crossed the island of Reunion on February 5 is said to have been the worst ever experienced there. It resulted in the death of at least 45 persons.

Mr. D. Depledge, third officer of the British motor vessel *Athelempress*, en route from England to Java, via the Cape of Good Hope, reports encountering a cyclone on February 15–16. At midnight of the 15th the ship's position was in latitude 31° 15' S., longitude 53° 24' E. The gale began from ESE. at 3:20 a. m. of the 16th, and was of force 9 from a southeasterly direction from about 6 a. m. until noon, the vessel then being in 30° 58' S., 53° 33' E. The barometer was lowest, 29.32 inches, at 3 p. m., at which time the wind dropped and veered to SW., later increasing to force 8, then changing to NW. by N., force 9. The weather began improving at midnight of the 16th. This storm was moving apparently

toward the southwest, which is the usual direction taken by tropical cyclones in these latitudes in the Indian Ocean.

#### SEA-SURFACE TEMPERATURE OBSERVATIONS, MARCH, 1932

By GILES SLOCUM

Table 1 shows the average surface temperatures of the Caribbean Sea and the Straits of Florida for March, 1932. These figures are based upon about 80 per cent of the observations which will eventually become available. They are, therefore, preliminary, rather than final values. The final revised figures, computed from complete data, will be given at a later date.

#### CARIBBEAN SEA

The mean surface temperature of the Caribbean Sea for March, 1932, was above the seasonal average throughout the month. This was the warmest March, next to that of 1931, during the 13 years of record (1920–1932), and the twenty-fifth consecutive month with the mean temperature at, or above, the seasonal average.

#### STRAITS OF FLORIDA

The extremely high sea-surface temperatures, for this season of the year, which prevailed in the Straits of Florida during February, 1932, continued until about March 9. From then until the end of March the temperature anomaly was not more than a few tenths of a degree, although the departures remained positive in sign until the end of the third quarter-month. During the final quarter of the month, however, the average temperature was 0.4° below the 13-year mean. This was the first time a quarter-monthly mean temperature for the Straits of Florida area had been below the seasonal average since the second quarter of November, 1931.

TABLE 1.—Preliminary mean sea-surface temperatures (°F.) in the Caribbean Sea and Straits of Florida, March, 1932

Quarter	Period	Caribbean Sea			Straits of Florida		
		Mean (°F.)	Departure from 13-year mean (1920–1932)	Change from preceding month	Mean (°F.)	Departure from 13-year mean (1920–1932)	Change from preceding month
I.....	Mar. 1–7.....	79.2	+0.8	-----	76.3	+2.4	-----
II.....	Mar. 8–15.....	79.6	+1.0	-----	75.2	+0.5	-----
III.....	Mar. 16–23.....	79.3	+0.4	-----	75.8	+0.5	-----
IV.....	Mar. 24–31.....	79.7	+0.6	-----	75.3	–0.4	-----
	Month.....	79.4	+0.6	+0.7	75.6	+0.7	–1.2